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6/10-5
S72
P9

YEARLY SUBSCRIPTION \$1 IN ADVANCE.

Vol. 11.

JUNE, 1889.

No. 6.

B212750 6

THE

Southern Practitioner,

AN INDEPENDENT MONTHLY JOURNAL,

DEVOTED TO MEDICINE AND SURGERY.

NASHVILLE, TENNESSEE.

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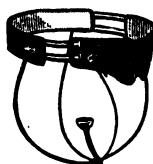
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After the expiration of the first minute, transfer two drops, by means of a glass rod, into one of the 2-oz. bottles. The bottle is shaken and placed near a window. At the end of every minute repeat this manipulation with a new bottle until the coloration is no longer produced. The time necessary for effecting this change gives the indication as to the amount of diastase present. Undecomposed starch mucilage gives a greenish blue color and after standing some time a blue precipitate. Soluble starch, the first product of the change, yields with Iodine, a dark blue solution without a precipitate. If the amount of soluble starch equals that of dextrin and sugar, the color of the solution will be purple. As the soluble starch disappears, the solution will be a decided red color if dextrin predominates, or faintly reddish if sugar be in excess; and colorless. This experiment is very interesting and is simple to perform.

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Vol. 11.

NASHVILLE, JUNE, 1889.

No. 6.

Original Communications.

EPIDEMIC CEREBRO-SPINAL MENINGITIS.*

BY J. S. NOWLIN, M. D., OF SHELBYVILLE, TENN.

I believe our nomenclature sometimes leads to a mistaken pathology.

The disease which we have been accustomed to term cerebro-spinal meningitis, is not in my opinion an inflammatory lesion, though the name at once and irresistibly directs our thought to an inflammation of the coverings of the brain and spinal column. Inflammation of these membranes does not differ from inflammation in tissues of like character in other parts of the body.

In all the different tissues of the body, this lesion has as great or greater uniformity in manifestation, than any other morbid process with which we are familiar.

It is true that the process is modified in accord with the particular structure, whether it be osseous, muscular, aveolar,

* A paper read before the Bedford County Medical Society.

mucous or serous. There must be, however, too much blood, with stasis, followed by a transudation or exosmosis of the corpuscles into the surrounding tissues, these corpuscles being arrested and out of proper relationship, swell from the absorption of fluids. They then break down themselves and destroy the tissues around, resulting in pus, or they are absorbed, ending in resolution, or in other instances, softening.

The death or recovery which follows such process is not preceded as a rule by such phenomena as we observe in cerebro-spinal meningitis, so-called.

Aitkin says, in all epidemics, cases have occurred in which no appreciable changes have been found in the cerebro-spinal membranes. These cases, exhibiting no evidences of change, were as often found when the patient had lived several days as when death occurred within a few hours.

Dr. Burdon Sanderson found "the gelatinous substance, together with the cell-like bodies in the sero-purulent fluid which occupied the spinal sub-arachnoid space, and also in the ventricles, though exhibiting corpuscles and granules floating, yet under the microscope, did not present that uniformity of size and character which are met with in normal pus. Occasionally they exhibited the appearance of an external cell membrane, but in most instances they could not be made out, even in perfectly fresh exudations, in cases that were examined as early as eight hours after death. They invariably contained granules, some of which cleared away on the addition of acetic acid. Those remaining were highly refractive, but did not assume any special form of arrangement."

Two interesting cases were reported by Dr. Linc, of Philadelphia, in the *American Journal of Medical Sciences* for the months of July 1864 and 1865. One was an adult female, and the other a child aged eighteen months. One of these cases died in twelve and the other in fourteen hours after being seized in the midst of perfect health. In both cases the cerebro-spinal meningeal vessels were filled with black blood, but there were no traces of inflammation and the substance of the brain and the medulla oblongata was natural in appearance and consistency.

This line of argument might be greatly prolonged, with statements of eminent observers and investigators in pathology, but this will suffice for the purpose of this paper, and I pass this part of the subject with the remark that nothing should be called inflammation which does not uniformly present the pathological characteristics of that lesion.

If it is not an inflammation of these membranes, the question at once arises, to what cause then shall we look as productive of the peculiar and marked phenomena found in this disease?

In answering this the most logical conclusion looks to a malarial congestion of the nerve centres, as being capable of setting up all the varied symptoms and sequelæ met with in this fearful trouble. It will be admitted that the word congestion is not just what we want, and indeed, I do not think it essential, but I do put weight and stress on the term malaria, as the cause, and the nerve centers as the seat of the affection.

Here, then, is the thought desired to be set forth in this paper—that is to say: the etiology is malaria, and the pathology is found in the nerve centers. The proof is found in the following compilation of facts:

The epidemic influences which produce this disease have been prevailing in Shelbyville and vicinity from December last. From that time to the first of April I have seen a few of the most marked and malignant types, together with the manifestations of this disease in every conceivable shape.

In December Mr. H., aged 44, was attacked. He had not been well for two or three weeks; he had pain in shoulder and neck, and pain in the arms and back. He kept up his work on his farm and attributed his pain to rheumatism. He came to Shelbyville and returned on Saturday, a distance of four miles; during the day his nose bled freely, this had also occurred on different days previously; he complained somewhat the same way on Sunday. Sunday night at 8 o'clock he had a chill, head, neck and eyes pained him intensely. His knee-joints were excessively painful; his throat was sore. In less than an hour he was delirious and almost entirely deaf.

Dr. Ab Ryal was called to see him, and found his pulse

about 90, and bounding, with a temperature of 100. He could be kept in bed only by the greatest efforts of two or three strong men. He put him upon the bromides, with heavy mercurial purgatives, and large doses of morphia. He also cupped him, and poured large quantities of well water on his head.

At 11 o'clock Monday night, after he had been sick twenty-four hours, I saw him with Dr. Ryal. He was hardly conscious of his surroundings, his mind was entirely obscured, and he was very deaf. He could see with difficulty, and there was ptosis of the lid of the left eye. The pupil of one eye was much more dilated than the other, and both were slow in responding to light. He was continuously tossing, and when he was still for a moment, it was on the side, and never on the back. He was constantly desiring to micturate, but voided his urine with the greatest difficulty. He had red spots on his body, face and arms, from the size of a pin point to a five cent piece. His knuckles and wrists were especially red; his skin was in the highest state of hyperæsthesia I have ever seen; pressure upon the hand would produce contraction of the muscles of the face. There was an herpetic eruption on his lips and around the mouth. The head was slightly drawn backward. He had a distressing nausea, vomiting from the beginning.

We gave him six drops of veratrum every three hours, and ten grains quinine every hour until six in the morning, having given the first dose of quinine at about half past 11 o'clock. Although he vomited frequently, we thought he had retained most of the quinine. At 6 o'clock in the morning his symptoms were very much relieved. He was rational, could see fairly well, though one eye squinted; stomach better, and he had lain quiet and slept some. He drank some milk and had had a free and copious action from the bowels.

The quinine was suspended until evening, the veratrum was not given after 4 o'clock in the morning. He had morphia, bromide of potassium, and tincture of gelseminum through the day. He passed through the day Tuesday better than on Monday. As the night approached his ugly symptoms all returned,

and notwithstanding the quinine and every other available means were pressed through the night, it was quite evident on Wednesday morning that he must die, which he did about 9 o'clock Wednesday night. On Tuesday his son, thirteen years old had a chill, followed by pain in nape of the neck, sick stomach, headache and sore throat, pain in the back, and the peculiar pain about the joints of the lower limbs. He was given quinine and calomel, and recovered in a few days with very little trouble. He had a similar epistaxis to that of his father. He had no eruption.

On Friday forenoon, Mr. H.'s little daughter, aged five years, apparently in fine health, and out in the yard at play, came hurriedly to her mother, and complained of a pain in the abdomen, in the region of the umbilicus. She soon had a shivering, followed by pain in the head and neck. Pulse 140, breathing rapidly, with an occasional sigh, temperature 103; delirium and sick stomach, marked opisthotonus, skin hyperesthetic. She lost the sight of one eye from infiltration of the cornea, which became perfectly white, and she had the red eruption. She was bathed, given gelsemimum, quinine in large doses, and nothing was left undone that promised relief. She died on Monday night.

Enquiry developed the fact that Mr. H. had not been well all the autumn, that he had pains in the shoulders, neck and arms, which he thought was rheumatic.

This family lived on the side of a considerable hill. The front of the house was three or four feet above the surface, while the rear was resting on the ground. The ground around the rear and South side of the house was continually damp. The water that the family drank for the most part, was from a spring, which had been dry during the summer months. It had been walled up years ago with wood, which is now in a state of decay. The washing of soil, leaves and grass, and every conceivable thing, had lodged for years within this walled enclosure. When the stream from the spring began in the autumn, it was very sluggish. Here, in my opinion, is found the source of the cause of sickness in this family.

On March 6th, Will G. was attacked with shivering, followed by intense pain in head, neck and back, and bowels. His knee-joints were painful, and had sore throat. He had been very unwell for several days. His nose had bled several times. The cold stage was followed by contractions of the muscles of the arms and hands. He had spells of difficult and rapid, panting, breathing ; his pulse and temperature were normal. He was attacked about 10 o'clock on Wednesday, the 6th of March. Dr. Will Orr was called to see him, and gave him anodynes, bromides, mustard and calomel. Dr. G. L. Landis saw him that afternoon. I should mention that he was boisterously delirious from the beginning and had sick stomach. He had spots on the face and herpetic eruption of the lips. On Thursday afternoon I was called to see him, with Dr. Orr, and found the patient as above stated. We gave him large doses of quinine, calomel and morphine ; the morphine did not affect him pleasantly. In eight hours we had given him eighty grains of quinine, would have given him the same amount in less time, but had to be governed by the nausea. We also gave him every four hours one drop of carbolic acid with three drops of tincture of iodine in water. He had large quantities of cold water on the head, at first, but it was soon noticed that hot water had the most desirable effect, as it quieted him for the time being.

He recovered in about twelve days. I may mention that after being up a few days and walking a quarter of a mile to a neighbor's, he had a relapse, in which many of the first symptoms recurred, as I am informed by Dr. Orr. He has at this writing entirely recovered. His sister had the same symptoms, not so severe ; she recovered.

On March 24th, G. C., aged 21, living in Shelbyville, had a chill, followed by fever ; pain in head intense, pain in neck, back and limbs, especially in calves of legs and knee-joints, hyperæsthesia of skin and sick stomach. Temperature 103, pulse 100, tongue broad and coated. He had red spots on hands, wrists and body. I saw him at 10 o'clock Sunday night, the 24th. At this time he was only slightly delirious. Gave him

ten grains calomel and forty grains quinine during the night, with sufficient morphine to keep him quiet. Monday morning, temperature lower, and pulse 90; pain in head more intense and patient somewhat stupid. Considerable deafness and muttering delirium. He was given bromides, with gelseminum, ergot and calomel. He also had the tincture of iodine and carbolic acid mixture. Quinine was given as rapidly as possible. Dr. T. S. Hardison, of Lewisburg, saw him with me. On Thursday afternoon he had a convulsion. Thursday night the convulsions recurred several times and his right side became paralyzed. He died Friday afternoon, having been sick five days.

These cases were of the most malignant type. Quite a number of cases, more mild, were treated during the months of January, February and March. They had the erratic pains, which were felt in different parts of the body. Headache, pain in nape of neck and in lower limbs. Many cases had redness of the skin on hands and wrists. Some had fever for three or four days, others for a much shorter time. I could give the detailed history, if necessary. They passed under the head of cold, or bilious attacks, or malarial, and were frequently called rheumatism. They all yielded readily to quinine.

The three cases in Mr. H.'s family covered the extreme manifestations of malaria. The prodromata in the father's case were clearly indicative of nerve lesion, the same as usually produced by malaria. The shifting and shooting pain in the body, the headache, pain in back and limbs, all point in that direction. The epistaxis was evidently dependent on malarial toxæmia.

The bleeding nose in the beginning or in the early part of a fever is strong evidence of a malarial origin. The herpetic eruption about the lips was clearly the result of a malarial nerve lesion, and is often observed in the milder types of malarial trouble.

If we take the three common types of malarial fever—the intermittent, remittent, and pernicious, we have extremes wide

enough to cover all the phenomena and peculiarities of the so-called cerebro-spinal meningitis.

The symptoms of malarial blood-poisoning are as protean as the shades of the chameleon. The effects of the quinine given in large doses, and often repeated in the treatment of these cases, shows that it holds a controlling influence.

I am satisfied that the use of the tincture of iodine and carbolic acid was also beneficial. It not only had a pleasant effect on the stomach, but evidently a curative power.

The hand of the practitioner, if he is guided by the authorities that I have read, must be trembling and unsteady. We are left in uncertainty as to the cause, very little hope as to treatment, and nothing as prophylactic.

If there is any force in the history of this disease and the treatment as above given, it proves that we may expect much benefit from the use of quinine, and that if it is used as a prophylactic, many cases that might prove fatal can be warded off. The quinine should be given to every member of a family where a case of so-called cerebro-spinal meningitis has developed, upon the first complaint.

The young man Mr. C., had just one week before his fatal sickness headache, and *redness of hands and wrists*, which passed off in a few hours. If he had consulted a physician and taken quinine then, he would in all probability have had no return.

I have prescribed for a number who had similar prodroma, who never went to bed, but recovered without trouble.

TYPHO-MALARIAL FEVER—SO CALLED*

BY F. M. DUKE, M. D., OF WARTRACE, TENN.

Mr. President and Gentlemen of the Tenn. State Medical Society :

It is not my purpose to occupy your valuable time discussing the name of typho-malarial fever; nor to enter into the anatomy and pathology of the disease further than to explain to you why

*A paper read at the 56th Annual Meeting of the Tenn. State Medical Society.

I was induced to adopt the plan of treatment which I have practiced for the past three years ; but to devote my remarks to a few practical thoughts on the treatment of the disease, based on clinical observations; suffice it to say, however, that I do not believe it to be of typhoid origin, but a malarial fever, excited and fed or kept up by an irritation or an inflammation existing some where in the system, and in my opinion in the tract of the alimentary canal ; more frequently in the stomach and small intestines than in the large intestines. Peyer's patches are not involved as often as other parts of the alimentary canal. Typho-malarial fever may in its general outlines resemble typhoid fever very much, but the two diseases are separate and distinct. Dr. Squire, of London, speaks of a simultaneous outbreak of enteric fever, and of typho-malarial fever in regiments in adjoining camps. In this outbreak it was at first considered that the two fevers might be one and the same disease, till fatal cases demonstrated that the two diseases were perfectly distinct. Autopsies in one camp showed local lesions of the intestinal glands of typhoid fever in a fatal case, in the other camp the intestinal glands were found to be healthy. The same author states that the presence of ulcers in the small intestines in patients dying of malarial fevers, has been observed over and over again, Annesly, Twining and others mention ulcerations of the small intestines in protracted cases of malarial fever.

Post-mortem examinations in typho-malarial fever show the following pathological condition : Usually there is congestion of the throat and pharynx, with excessive amount of secretion, this condition sometimes extends through the entire length of the alimentary canal, with patches of inflammation scattered irregularly in different parts of both small and large intestines, occasionally with enlargement of the closed glands. Most observers find the congestion of the mucous coat to be greatest in the duodenum, and upper part of jejunum, while some describe the ileum as being healthy. In the more severe or prolonged cases ulcerations may be found in almost any part of the alimentary canal : they are unequal in size and distribution ; usually they are superficial, not penetrating deeper than the mucous membrane. The

spleen is enlarged and soft; the liver congested and hard; the gall bladder sometimes distended with bile; the lungs show signs of complications when such have existed. Thus it is sure that the pathological state in typho-malarial fever is that of a malarial poisoning and not that of typhoid fever, hence, we have the following symptoms: The onset is usually less marked than in other forms of malarial poisoning. There is sore throat with tonsilitis occasionally, some congestion of the eyes with headache, with alternations of hot and cold sensations; this may exist for twenty-four or thirty-six hours accompanied with sick stomach, while at other times it is sudden and shows no difference from an ordinary attack of remittent fever, and may be diagnosed as such. The sore throat is nearly always present, with aches and pains in various parts of the body. In the first stages, sickness is a very frequent symptom and is referred by the patient to the stomach and bowels, vomiting of green bilious matter is not an unusual symptom. Diarrhoea is generally present to some extent, but in most cases easily controlled. The stools are generally thin and of a light brown color, thickly studded with bubbles of gas; sometimes they are greenish as in common remittent fever. There is tenderness on pressure over the greater portion of the abdomen together with the tympanitis, the urine is frequently scanty and high colored. In the early stages hepatic congestion is frequent, the spleen is enlarged and tender, and sometimes pain is referred to it. In the beginning the tongue is furred and thickened, as the disease advances it may become dry, brown and cracked. Low muttering delirium is a frequent symptom; and occasionally we find rose colored spots on the body.

In the majority of cases the pulse is small, feeble and rapid, and does not bear the usual relation to the temperature, which is raised from the beginning of the attack. At first the remissions are complete, becoming less marked as the disease advances, they occur irregularly and are not confined to any particular time of the day or night, unlike that of typhoid fever which is highest in the afternoon or evening. Another distinguishing character in typho-malaria, is the high temperature which is reached much earlier in the course of the disease, and the changes of temperature

are more active, that is, the remissions are more marked and require less time to pass from one extreme to another, than in typhoid fever. The duration of the disease varies greatly, according as you view and treat it. If you treat it as typhoid the duration is from three to seven weeks and sometimes three months; but if you treat it as malarial fever, with gastro-enterical complications, the duration is from six to ten days. These are the facts, as they have been observed of the disease in Bedford county where it has prevailed for several years. In the treatment of typho-malarial fever, there are four principal objects to be accomplished.

1. To control the rapid action of the heart.
2. To reduce the high temperature.
3. To relieve the irritation or inflammation that may exist.
4. To nourish and support your patient.

In almost every case we should begin with the administration of small doses of mercury and continue till the dryness of the tongue is relieved and moisture restored, carefully avoiding ptyalism, after which we have little trouble from nausea and vomiting.

For the first indication we have a most perfect and satisfactory remedy in the tincture of veratrum viride. This should be used freely until the cardiac pulsations are reduced at least ten pulsations below the normal standard. I usually begin with two and a half drops given at intervals of one hour, and increase if necessary, until the desired effect is accomplished; after that, just enough to keep it at that point. This condition must be accomplished to get the full benefit of the drug.

In the next place our attention is called to the temperature, for as a rule it does not fall in proportion with the cardiac movements and requires special treatment. Now it is that salicylate of soda comes to our relief. With this drug we can reduce the temperature below normal. It has been my practice to begin with twenty grains given every three or four hours, until the thermometer will register 98 under the tongue, after which it is continued in quantity sufficient to retain the temperature at that point, occasionally it becomes necessary to increase the quantity to forty, fifty, and even sixty grains every four hours: the effect

must be accomplished ; in fact, this remedy is of little effect unless it is given in quantity sufficient to reduce the temperature to the normal state or a little below. Quinine in doses of three to six grains is usually given alternately with salicylate of soda.

Now we come to consider the treatment of the irritation or inflammation that may exist. This must be determined to some extent by the character and location of the disorder. In the first place, it will be remembered that when the circulation is reduced to sixty and the temperature to ninety-eight, there is little chance for an inflammation to exist but a short time ; it will naturally starve out in a short time by lack of support. We may give turpentine emulsion internally. Listerine acts well where there is nausea. Large hot fomentations well saturated with turpentine, may be applied over the bowels. The free use of turpentine is very effectual. The complications must be carefully watched for and promptly treated. This plan of treatment should be actively proposed in the early part of the disease. Nourishment should be carefully and regularly administered in an easily digested and concentrated form throughout the disease. Egg-nog, milk punch and wines are valuable in convalescence. The strength in this, as in other diseases should be carefully supported.

The object of this paper is to impress the great importance of the early, free and continued use of veratrum and salicylate of soda, in the treatment of typho-malarial fever, so as to keep the circulation and temperature below the standard until all irritation has subsided, after which the fever will not return. It will be remembered, we stated that the duration of typho-malarial fever under this treatment was from six to ten days. Time nor space does not admit of detailed reports of cases in this paper. Reference to my note book shows that I have treated since September, 1886, fourty-seven cases of typho-malarial fever, of that number convalescence began on fifth day with four, sixth day with twenty-four, seventh day with fifteen, eighth day with five, tenth day with one, sixteenth day with one. Pregnancy existed in the last case which prevented the free use of veratrum.

These cases occurred in the same community in the same town, frequently in alternate houses, and members of the same family,

where other physicians were having those long continued cases of typho-malarial fever, with whom there were a number of deaths, and some of them were in the hands of able and honored members of the medical profession. Some of my cases had been treated without effect by other physicians, from six to ten days before they came under my care. Permit me to say here, that none of my fever cases have died in the past three years. Let me reiterate, that typho-malarial fever is a malarial disease, and when physicians so consider and treat it, many a case of wearied sickness will be abbreviated.

Selections.

A TONIC FORMULA.—In the New York *Medical Journal* for July 31, 1886, Professor Allard Memminger, of Charleston, S. C., published a short article on “Bright’s Disease of the Kidneys successfully treated with Chloride of Sodium.” The salt is given in doses of ten grains three times daily, the doses being increased by ten grains each day until they amount to fifty grains each. It is then diminished to sixty grains in the day and continued. I employed this treatment in a few cases, but did not meet with the full measure of success noted in four cases reported by Professor Memminger, although in some instances there was considerable improvement. The suggestion by Professor Memminger, however, and his theory of the mode of action of the sodium chloride, pointed to a possible deficiency in certain cases of disease in the saline constituents of the blood. Under this idea I prepared a formula in which most of the important inorganic salts of the blood are represented, with an excess of sodium chloride and a small quantity of reduced iron, the various salts, except the sodium chloride, being in about the relative proportion in which they exist in the normal circulating fluid. I first used this preparation in the form of powder, giving ten grains three times daily after eating. It was afterwards put up in gelatin capsules, each containing five grains, but these absorbed moisture so that they would not keep well in warm and damp weather. With the as-

sistance of Fraser & Company, 208 Fifth Avenue, New York, I finally modified the formula so as to avoid this difficulty. The preparation is now in the form of compressed tablets made by Fraser & Company, tablets made by Casswell, Massey & Company, 1121 Broadway, and sugar coated tablets made by Wanier & Imgard, 1322 Broadway—all under the name of saline and chalybeate tonic. I usually prescribe two tablets three times daily after eating. Of these preparations I prefer the sugar-coated tablets, the other occasionally producing slight nausea. In a few cases six tablets daily have produced some "fullness" of the head, when I have reduced the dose to one tablet three times daily.

The following is the formula that I finally adopted, the product of which may be put up in capsules:

Saline and Chalybeate Tonic.

R. Sodii chloridi (C. P.).....	3 ij;
Potassii chloridi (C. P.).....	gr. ix;
Potassii sulph. (C. P.).....	gr. vij;
Potassii carb. (Squibb).....	gr. iij;
Sodii carb. (C. P.).....	gr. xxxvj;
Magnes. carb.....	gr. iij;
Calc. phos. precip.....	3 ss;
Calc. carb.....	gr. iij;
Ferri redacti (Merck).....	gr. xxvij;
Ferri carb.....	gr. iij.

M. In capsules, No. 60.

Sig.: Two capsules three times daily after eating.

I first used this tonic in a case of simple anæmia in Bellevue Hospital in July, 1887. In this case the anæmia was profound and the pallor excessive. It had existed for several weeks, there was loss of appetite, and the patient, a female about thirty years of age, was very weak and unable to leave the bed. A powder of ten grains was given three times daily, and this, with good diet, constituted the only treatment. In forty-eight hours the patient was sitting up, with a fair appetite and improved appearance, notably in color. At my next visit, two days later, she had left the hospital and was greatly improved.

Since the summer of 1887 I have given the tonic in nearly every case in private practice in which a chalybeate was indicated.

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SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of Stillingia Sylvatica, Lappa Minor, Phytolacca Decandra, Smilax Sarsparilla and Xanthoxylum Carolinianum, as collected by Dr. GEO. W. MCDADE exclusively for ELI LILLY & Co., and endorsed by DR. J. MARION SIMS.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and Tonic properties, *eliminating specific poison from the blood and increasing the proportion of red corpuscles in anæmic patients to a wonderful degree*; is endorsed by the medical profession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercury, the iodides and Arsenic; and is a certain remedy for Mercurialization, Iodism and the dreadful effects often following the use of Arsenic in skin diseases.

SUCCUS ALTERANS is also strongly recommended for its Tonic and Alterative effects in myriad forms of scrofulous disease, and in all cases where anæmia is a factor. Such patients rapidly develop a good appetite, sleep soundly and gain flesh rapidly. Many cases are on record where patients increased ten to twenty-five pounds in weight in a few weeks.

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This preparation, consisting of the Extract of Beef (prepared by Baron Liebig's process), the best Brandy obtainable, Soluble Citrate of Iron, Cinchona and Gentian is offered to the Medical Profession upon its own merits. It is of inestimable value in the treatment of all cases of Debility, Convalescence from Severe Illness, Anæmia, Malarial Fever, Chlorosis, Incipient Consumption, Nervous Weakness, and maladies requiring a Tonic and Nutrient. It is quickly absorbed by the Stomach and upper portion of the Alimentary Canal, and therefore finds its way into the circulation quite rapidly.

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→All Cases of General Debility.←

It is essentially a Food Medicine which gives tone and strength in cases where other remedies have failed or been rejected. A single trial will convince any fair-minded Physician of the value of this preparation.

By the urgent request of several eminent members of the medical profession, I have added to each wine-glassful of this preparation two grains of Soluble Citrate of Iron, and which is designated on the label "With Iron, No. 1;" while the same preparation, Without Iron, is designated on the label as "No. 2."

In order that Physicians unacquainted with

COLDEN'S LIQUID BEEF TONIC

may become familiar with it, we will upon application send a sample bottle free (express charges paid), to any Physician in the United States. Please ask your Dispensing Druggist (if he has not already a supply) to order it. In prescribing this preparation physicians should be particular to mention "COLDEN'S," viz., "Ext. Carnis Fl. Comp. (Colden)." It is put up in pint bottles, and can be had of Wholesale and Retail Druggists generally throughout the United States.

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Physicians know the great value of the local use of sulphur in the Treatment of Diseases of the Skin. Glenn's Sulphur Soap is the Original and Best combination of its kind, and the one now generally in use. For sale by All Druggists.

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In many cases I have not been able to watch the effects of the remedy, and in many I kept no record. In thirty-five cases which I have noted as cases of anæmia, with loss of appetite, etc., I have more or less complete records. In twenty-two cases I noted very great improvement, in twelve cases improvement not so well marked, and in one case no improvement.

I have also records of five cases of chronic Bright's disease of the kidneys in adults in which the tonic was the only medicinal remedy employed.—Austin Flint, M. D., LL. D., in the N. Y. *Medical Journal.*

URETHRAL STRICTURE — TREATED BY ELECTROLYSIS.—
Dr. Robert Newman (*Med. Register*) concludes a lecture thus:

1. Any good galvanic battery will do, which has small elements, and is steady in its actions; the twenty-cell battery, carbon and zinc elements, is an excellent instrument, and particularly sufficient for the beginner.
2. The fluid for the battery ought not to be used too strong.
3. Auxiliary instruments, as galvanometer, etc., are important to the expert, but not necessary for the beginner.
4. For the positive pole a carbon electrode is used, covered with sponge, moistened with hot water, and held firmly against the cutaneous surface of the patient's hand, thigh or abdomen.
5. For the absorption of the stricture, the *negative* pole must be used.
6. Electrode bougies are firm sounds insulated with a hard-baked mass of rubber. The extremity is a metal bulb, egg-shaped, which is the acting part in contact with the stricture.
7. The curve of the bougie is short; large curves are mistakes.
8. The plates must be immersed in the fluid before the electrodes are placed on the patient, and raised again after the electrodes have been removed.
9. All operations must begin and end while the battery is at zero, increasing and decreasing the current slowly and gradually by one cell at a time, avoiding any shock to the patient.

10. Before operating, the susceptibility of the patient to the electric current should be ascertained.
 11. The problem is to absorb the stricture, not to cauterize, burn or destroy tissues.
 12. *Weak currents at long intervals.*
 13. In most cases a current of six cells, or from two and one-half to five milliamperes, will do the work, but it must be regulated according to the work to be done.
 14. The *séances* should be at intervals not too frequent in succession.
 15. The best position for the patient to assume during the operation is that which is most comfortable for him and the operator. I prefer the erect position, but the recumbent, or others may be used.
 16. Anæsthetics I like to avoid; I want the patient conscious, so that he can tell how he feels.
 17. Force should never be used; the bougie must be guided in the most gentle way; electricity alone must be allowed to do the work. Avoid causing hemorrhage.
 18. During one *séance*, two electrodes, or other two instruments in succession, should never be used.
 19. All strictures are amenable to the treatment by electrolysis.
 20. Pain should never be inflicted by the use of electrolysis; therefore it should not be applied when the urethra is in an acute or even subacute inflammatory condition.
 21. The electrode should not be greased with substances that are non-conductors, and would insulate.
- If the foregoing rules are observed by an expert in surgery and electricity, success and cure must follow. This has been proven by a vast amount of clinical facts, recorded by myself, as well as by many eminent men in different parts of the world.—*The American Lancet.*

SANDER & SONS' Eucalypti Extract (Eucalyptol)—Apply to Dr. Sander, Dillon, Iowa, for gratis supplied reports on cures affected at the clinics of the Universities of Bonn and Greifswald.

"A QUESTION OF LAW:—Among the homœopaths there has been a difference of opinion and practice respecting the proper answer to the above question. Most practice regular medicine and surgery under the garb of homœopathy. Possibly a few practice homœopathy according to their published tenets, but their number is small. The New York *Medical Times* believes that homœopaths should drop their distinctive title and call themselves simply physicians. Then it says they could honestly practice anything they thought best for their patients. A short time since it addressed an inquiry to Hon. Geo. C. Barrett, Judge of the Supreme Court of New York, worded thus: "Has a physician designating himself an 'homœopathist,' and called as such to a patient, any legal or moral right to adopt any other than homœopathic means in the treatment of the case?" The Judge says there can be but one answer to this question, and that is in the *negative*. "If," he says, "I call in a medical man who designates himself as a 'homœopathic physician,' it is because I do not wish to be treated otherwise than homœopathically. There is an implied understanding between myself and the homœopathist that I shall receive the treatment, which, by tradition and a general consensus of opinion, means small doses of a single drug administered upon the principle of *Similia similibus curantur*. If there is to be any variation from that method, I have a right to be informed of it, and to be given an opportunity to decide. Common honesty demands that before a confiding patient is drugged with quinine, iron and other medicaments, either single or in combination, he should be told that the 'homœopathist,' has failed, and that relief can only be afforded by a change of system. An honest 'homœopathist,' who has not succeeded, after doing his best with appropriate remedies administered on homœopathic principles, should undoubtedly try anything else which he believes may relieve or save his patient. But when he reaches that point the duty becomes imperative of taking his patient into his confidence. The patient may accept the services of the homœopathist, or he may prefer another physician.

"All this is the logical sequence of a man calling himself 'homœopathist.' If I call in a man who is known simply as a

physician, then I expect him to employ any or all means he may deem necessary for my relief. With such an expectation, I called for his aid. Hence, if we are to have a class of men who propose in the interest of humanity to utilize the best that they can find in any or every school, 'pathist,' as a designation of fixed methods of practice, must be ignored, and the broad and noble title 'physician,' in its unreserved sense, be revived and substituted. When a patient sends for a physician of this class, he will understand that he is to have the physician's best judgment in the unprejudiced use of the ripest fruits of modern discovery in every field."—*The American Lancet*.

CHARCOT ON SUSPENSION IN THE TREATMENT OF PROGRESSIVE LOCOMOTOR ATAXY.—Professor Charcot recently gave a clinical lecture on vertical suspension of the body in the treatment of progressive locomotor ataxy and some other diseases of the nervous system. This novel method of treating tabes dorsalis was first initiated by Dr. Motchoukowsky, of Odessa, who published a *brochure* on the subject in 1883; but it received no attention in Western Europe till 1888, when Professor Raymond, of Paris, while on a scientific mission in Russia, was struck with the results presented to him. Dr. Ouanoff, his fellow-traveler (a pupil of the Saltpêtrière clinic), showed his practical application there. In Motchoukowsky's pamphlet considerable improvement was ascribed to it in twelve tabetic persons; also in various neurasthenias, independent of tabes, in which the sexual functions were reestablished by this treatment. The patient is suspended for about three minutes by a Sayre's apparatus, and the arms of the patient while suspended are raised every fifteen or twenty seconds to increase the traction on the spinal column.

Charcot's tabetic patients numbered eighteen, with 400 *séances*. Of these, four were only suspended each three times; the rest went on regularly. Of these Professor Charcot says: "The remaining fourteen have experienced in varying degrees an improvement quite remarkable." All were pronounced tabetics. Walking is improved to begin with; they say they can walk better after the first suspension. This improvement at first lasts

only a few hours, but after eight or ten sittings persists. After twenty or thirty sittings Romberg's sign disappears. Then vesical troubles are lessened or removed; also the lightning pains. Sexual impotence gives place to sexual desires and erections. (Experiments by Dr. Ouanoff on healthy persons have shown that this method has an exaggerating effect on virility). The cotton-wool feeling in the feet gives away more or less to healthy sensations, and in general the whole health improves. Every patient steadily improved, with one exception, a young tabetic, aged 22, who at first improved, then fell off, then again improved somewhat. But the knee-jerks have not reappeared in any of the patients after three months' treatment, nor are the pupillary symptoms altered. As to other diseases, a young female with Friedreich's disease was greatly improved by the treatment. In two neurasthenic and impotent patients the sexual functions were re-established. But a patient with disseminated sclerosis was made worse, for after two sittings a spasmody paraplegia appeared, which, however, gave way in three days. Further trial of this method is required before an opinion of its value can be given. The results are most encouraging so far, and at any rate perfectly harmless.—*London Medical Reporter*, March 20, 1889.

TREATMENT OF FOREIGN BODIES IN THE STOMACH.—A method of treatment for foreign bodies in the stomach, which appears to be generally known and practised with almost uniform success in both England and the continent, consists in the administration simply of large amounts of potatoes, to which the diet should be restricted. It is stated by Professor Cameron, of Glasgow, that this plan, which, so far as we know, is almost unknown in this country, originated with the London pick-pockets, whose custom it is to immediately swallow small articles of jewelry acquired in the pursuit of their profession, and then depend on their recovery through the evacuation which follows the abundant use of the potato diet. Several cases are on record where this method has proved eminently successful. Thus, Dr. Salzer (*Deutsche Medizinal Zeitung* for January 24, 1889) reports the case of a child who had swallowed a brass weight of three hun-

dred grains in September, 1887, and in whom the physician was on the point of performing gastrotomy. According to Dr. Salzer's advice the child was put in bed, kept on his right side, so as to facilitate the passage through the pylorus, and then fed with as much potato, prepared in different methods to stimulate the appetite, as he could be persuaded to take. In five days the foreign body was evacuated in the faeces. He also refers to a case of a patient who had swallowed a set of artificial teeth, and another who had swallowed a breast-pin one and a half inches in diameter, in both of which cases the foreign bodies were removed without difficulty.

At the meeting of the Society of Physicians in Vienna, at which the above cases were reported, the discussion which they stimulated led to the report of several other cases, one especially, by Hochenegg, which is especially remarkable in that it dealt with the case of a young carpenter, who in 1884, swallowed a long nail, which was removed by gastrotomy. Two years later the patient was so unfortunate as to swallow a second nail similar in all respects to the first. The potato-cure was employed, and the nail was secured after nine days. In the *Deutsche Medizinal Zeitung* for March 11, 1889, Dr. Deichmuller refers to a case of a young girl, 10 years of age, who had accidentally swallowed a pin. Pain was complained of under the breast-bone, and Dr. Deichmuller, acting on the suggestion acquired through the report of the above cases, restricted the patient to the potato diet. Very shortly afterwards the pain disappeared from the chest and was felt in the stomach. Six days later it appeared in the right inguinal region; two days subsequently, having increased in severity, it was felt in the left inguinal region, while in the evening of this day the foreign body was evacuated with the faeces.

It is hardly necessary for us to call attention to the principles upon which this method is based. Potatoes, as is well known, are composed of nearly twenty per cent. of carbo-hydrates, eighty per cent. of the solids being starch and cellulose. On account of this large amount of carbohydrate, a great portion will resist the action of the digestive juices. The cellulose and other carbohydrates increasing greatly in volume from imbibition with

water lead to an accumulation of an immense amount of indigestible residue; consequently the intestinal tube is, throughout the entire time of the administration of this food, filled with large masses of non-absorbable matter. The folds of the intestine become obliterated, and fixation of the foreign body in the intestinal tube is thus avoided. It is seen that from five to nine days, or even longer, are required for the evacuation of the foreign body, and in every case which does not seem desperate, a trial of this simple plan of treatment should precede resort to gastro-tomy. In fact, at the recent meeting of the Vienna! Medical College, Professor Billroth said that since the introduction of this procedure, gastrotomy for foreign bodies should become an obsolete operation.—*Therapeutic Gazette.*

A SIMPLE METHOD OF SECURING THE LINGUAL ARTERY DURING THE OPERATION OF EXCISION OF THE TONGUE WITH THE SCISSORS.—At a late meeting of the Medical Society of London, Mr. F. Bowreman Jesset read a paper describing his method of tying the lingual artery in excision of the tongue. He said that in some cases of excision of the tongue with scissors the hemorrhage was often very severe and even alarming. Moreover, in many of the cases that died after this operation, the fatal result was due to the fact that a quantity of blood found its way into the air-passages, and septic pneumonia followed. If this were so, it was obvious that it was all-important to prevent hemorrhage as much as possible during the operation. Again, in removing the tongue with scissors, if the artery was not seized directly it was divided it often retracted, and the bleeding point was with difficulty seen and secured. He had had opportunities of putting the method into practice, and had found it easy and effectual. The operation was only applicable when the disease was limited to the tongue itself, and when the floor of the mouth was free. The tongue being drawn well out of the mouth, the frenum and mucous membrane of the floor of the mouth around the half, or whole of the tongue if the entire organ was to be removed, was divided in the ordinary

way with scissors slightly curved upon the flat. The tongue next being drawn well forward and upward, a few fibres of the genio-hyoglossus muscles were divided and torn through deeply with the finger. An ordinary aneurism needle, threaded with No. 4 Chinese silk, was thrust deeply down between the two genio-hyoglossus muscles, the point being directed downward and backward until it was opposite the second molar tooth; the point was then turned outward and brought out of the incision previously made through the mucous membrane, unthreaded and withdrawn. The ligature was next tied firmly and deeply as possible. A pair of clamp forceps, curved and somewhat larger than those in ordinary use, were passed down and made to catch the tissues on the distal side of the ligature, to prevent the possibility of the ligature being snipped as the tongue was being removed. If it was desired to remove the whole tongue, the same maneuver was carried out, and the artery on the other side secured. The surgeon then could snip out the organ at leisure, with practically no hemorrhage.

—*Weekly Medical Review.*

ONE THOUSAND CONSECUTIVE CASES OF ABDOMINAL SECTION.—Mr. Lawson Tait reports a second series of one thousand consecutive cases of abdominal section, showing a diminution of the mortality from 9.2 in the first series to 5.3 in the second. He predicts that “this operation will revolutionize the obstetric art, and that in two years we shall hear no more of craniotomy (save for hydrocephalus) and evisceration, for this new method will save more lives than these proceedings do, and it is far easier of performance. It is the easiest operation in abdominal surgery, and every country practitioner ought to be able and always prepared to perform it.”

He describes the operation as follows: My method of operating is to make an incision through the middle line large enough to admit my hand, and then I pass a piece of rubber drainage-tube (without any holes in it) as a loop over the fundus uteri, and bring it down so as to encircle the cervix, taking

care that it does not include a loop of intestine. I then make a single hitch and draw it tight round the cervix, so as to completely stop the circulation. I give the ends of the tube to an assistant, who keeps them well on the strain, so as to prevent the loose knot from slipping, the reason of this being that should there be any bleeding and any necessity for further constriction, I could secure this in a moment, without undoing any knot, and the simplicity of this method greatly commends it.

I then make a small opening in the uterus, and enlarge it by tearing with my two forefingers, seize the child by a foot and remove it. I then remove the placenta, and by that time the uterus has completely contracted, and is easily drawn through the wound in the abdominal wall. The constricting tube will now probably require to be tightened, and the second hitch of the knot may be put on at the same time, and the work is practically done. Stuff a few sponges in the wound to keep the cavity clear of blood, and pass the knitting-needles through the flattened tube and through the cervix, and in this simple way a clamp of the most efficient kind is at once made. The uterus is removed about three-quarters of an inch above the rubber tube. The usual stitches are put in, the wound closed round the stump, which, of course, is brought to the lower part of the opening, and then the stump is dressed with perchloride of iron in the usual way.—*Weekly Medical Review.*



A NEW ANTIDOTE FOR MORPHINE.—In the *Internationale Klinische Rundschau* for January 27, 1889, Professor Arpad Bokai recommends picrotoxine as an antidote for morphine, on the ground that it exerts an antagonistic action to morphine on the respiratory centers; for, while morphine tends to paralyze these centers, picrotoxine exerts a powerful stimulating effect. Since, therefore, death in morphine poisoning is usually attributable to paralysis of the respiratory center, on this ground alone picrotoxine should be indicated as a valuable antidote. Further, morphine may produce such rapid reduction in blood-pressure

as to endanger life; while picrotoxine, on the other hand, is a powerful stimulant to the vaso-motor center, and is in this respect also an antagonistic to morphine. Prof. Bokai adds that the action of morphine on the cerebrum is directly opposed to that exerted by picrotoxine. Finally, Professor Bokai suggests that the previous administration of a small dose of picrotoxine might reduce the danger of asphyxia in chloroform narcosis.—*Weekly Med. Review.*

INFLAMMATORY CROUP VS. DIPHTHERIA.—Wm. Brodie, M. D., of Detroit, Mich., writes as follows of date April 12th to the editor of *The American Lancet*—Sir: On page 148, of the current month, you state that the Michigan State Board of Health has decided that the so-called “inflammatory croup should be classed with *communicable diseases*, and should be treated and reported with the same precaution as *diphtheria*, as the same are *identical*.” A professional experience of almost forty years proves the negative of such an assertion. The two diseases have no relation to each other, and I defy any member of the State Board of Health to prove to the contrary. Accepting the fact (which I do not) that diphtheria is contagious, I demand proof that “inflammatory croup is contagious” before accepting the *ipse dixit* of the Board. *Pure inflammation of the larynx* is a *rare disease*, and although often fatal, cannot be communicated.—*The American Lancet.*

IS SYPHILIS EVER CURED?—“Syphilis is never cured.” Such is the positive dictum of Dr. W. R. Gowers in his recent lecture on “Cerebral Syphilis.” Dr. Gowers should come to the United States and learn some of the methods in vogue here; for certainly many cases of syphilis in this country get well. “Syphilis,” says one well-known American writer, “is one of the most readily managed and promising of all diseases that affect the human race.” Says another writer: “In a large proportion of cases, syphilis will run its course and leave the patient in a healthy condition, even though no special treatment is instituted.” Still a third American syphiliographer says: “By far the largest

majority of cases will pass through the trouble easily and happily to a complete cure." It would appear that either American syphilis is a specially benign article, or the English physician writes from a very narrow experience in this affection.—*Med. Record.*

IMPOTENCE CONSEQUENT ON VARICOCELE.—Segoud reports on a case brought forward by M. Jamain in which the radical cure of a varicocele was followed by return of sexual power in a man twenty-six years old, in whom it had been in abeyance since puberty. This "frigidity" had resisted all methods of treatment, but ceased when the patient lay on his back. This position, or the use of a suspensory bandage, reducing the varicocele, caused an erection. Potency was readily brought about two months after resection of the spermatic vein. The author quotes various similar cases, especially one by Vidal de Cassis, in which the impotence and puerile voice peculiar to castrated persons disappeared after the operation.—*London Medical Recorder*, April 1889.

EPILEPSY CURED BY ABLATION OF A CEREBRAL TUMOR.—M. Pean has cured a case of epilepsy, which had lasted six years, by ablation of a cerebral tumor. The lesion was evidently situated at the level of the upper portions of the left ascending frontal and parietal convolutions, as the spasms and convulsions occurred principally in the right leg. Dr. Pean detected the presence of a fibrous lipoma, in the pia-mater. He extirpated this tumor, and the patient not only recovered from the operation, but since has been entirely free from the epileptiform symptoms from which he suffered. This operation serves to show of what incalculable use surgery may prove in localized cerebral motory affections.—*Paris Correspondence American Lancet.*

ELECTRIC TREATMENT OF HYSTERIA.—M. Didier (*Lyon Med.*) finds that a faradic current of moderate intensity is decidedly the most efficient treatment for hysteria hitherto discovered. It not only checks the paroxysms, but has a curative effect on the neu-

rosis. In every case of hysterical convulsions in which he employed it the seizure promptly ceased. He found it also of service in hystero-epileptic paroxysm, but less so in simple hysteria. As it is useless in epilepsy, by it we can at once distinguish whether the attack is hysterical or epileptic. At the beginning of the convulsions one electrode is applied to the epigastrium and the other to the nucha, the current taking the track of the aura. If used later, during the tonic or clonic stage, one electrode may be applied to the nucha and the other held in the hand, or both may be placed in the hands.—*Polyclinic.*

CHRONIC ALCOHOLISM.—In the treatment of this, Prof. Bartholow, says: For the disorders of the digestion, morning vomiting, loss of appetite, accompanied by wakefulness and nervousness, the appropriate remedies are abstinence, careful alimentation, and such tonics as quinine, nux vomica, and the administration of bromide of potassium to procure quiet sleep. In the more chronic cases, where degenerative changes may be expected to have taken place, arsenic in small doses, hypophosphites and cod liver oil are recommended, and should be given for several months. Chloride of gold and sodium or corrosive sublimate will retard changes taking place in the connective tissue, if given early enough.—*College and Clinical Record.*

THE DEVIL WAS SICK ; THE DEVIL A SAINT WOULD BE.—European journals tell of a doctor who, at law, is seeking to compel a Hungarian nobleman to give him half his fortune, for services to his wife. It seems that the nobleman, when his wife was very ill, promised to give the doctor this sum, if his wife recovered. The wife did recover, and the nobleman paid the doctor handsomely, but the latter wants the promise to him fulfilled, viz., \$250,000.—*Ex.*

CENTRALLY LOCATED.—Sturtevant House, Broadway cor. 29th, N. Y. American and European plans. Board \$3 to \$4 per day; rooms \$1 and upwards.

Reviews and Book Notices

LECTURES ON NERVOUS DISEASES, by AMBROSE L. RANNEY, A. M., M. D., Professor of the Anatomy and Physiology of the Nervous System in the New York Post Graduate Medical School and Hospital; Professor of Nervous and Mental Diseases Medical Department of the University of Vermont; Author of "The Applied Anatomy of the Nervous System"; etc., etc. Profusely illustrated with original diagrams and sketches in color by the author; carefully selected wood-cuts and reproduced photographs of typical cases. Eight vo., cloth, pp. 778. F. A. Davis, Publisher, Philadelphia, 1888. Price \$5.50.

This handsome volume of excellent reading matter is the outcome of the author's efforts in the lecture field, wherein he has notably distinguished himself. In the first part is given the facts (anatomical, physiological and pathological,) upon which the science of cerebral and spinal localization of to-day is based.

Section second discusses the various steps which should be taken by a student of neurology during the clinical examination of the patient.

The next two sections treat of individual diseases of the brain and spinal cord. Each is discussed from the standpoint of the localization of the lesions described.

In the section treating of functional nervous diseases he gives a full resumé of the researches of Dr. Geo. T. Stevens respecting the eye defects and eye strain upon the causation and cure of these imperfectly understood conditions. The author says that he has had an extensive experience in the management of these cases and is able from this standpoint to indorse Dr. Stevens' views.

He says that no other treatment has given him so satisfactory results in severe forms of epilepsy, hysteria, chorea, neuralgia, headache, insanity, and functional visceral derangements.

His final section is devoted to a full consideration of electricity, describing both the best apparatus and the best methods of using it to secure the desired results.

The illustrations are numerous, excellent, and serve most admirably to elucidate the text. The colored diagrammatic illustrations employed by the author being a marked feature of the work, which certainly contains a large amount of valuable and exceedingly interesting material excellently arranged.

The work is well printed on good paper and handsomely bound, and should find a prominent and accessible place in the library of any one devoting attention to this branch of medicine.

BIDDLE'S MATERIA MEDICA AND THERAPEUTICS, for Physicians and Students; eleventh edition; by the late JOHN B. BIDDLE, M. D., Professor of Materia Medica in Jefferson Medical College, Philadelphia. Thoroughly revised, and in many parts rewritten, by his son, CLEMENT BIDDLE, M. D., Assistant Surgeon U. S. Navy, assisted by HENRY MORRIS, M. D., Demonstrator of Obstetrics in Jefferson Medical College. Eight vo., illustrated, pp. 607. Price, cloth \$4.00; leather \$4.75. P. Blakiston, Son & Co., Publishers, 1012 Walnut street, Philadelphia, 1889.

In calling the attention of our readers to this well known standard work, needing no criticism at our hands, we do not think we could do better than give the following extract from the preface to the eleventh edition :

"The exhaustion of the tenth edition of Biddle's *Materia Medica* has rendered necessary the preparation of a new one. In doing this the editors have carefully gone over the entire work, paying particular attention to the expurgation of obsolete matter, the correction of errors, and the rewriting of various articles that it seemed to need.

They desire to call attention to the following subjects as constituting the principal alterations made by them, viz.: The addition of twenty-one new cuts, the omission of useless ones, the introduction of concise statements of the action of new drugs that have recently crept into the domain of pharmacology, as Hypnone, Urethan, Papaya, Adonidine, Strophanthus, Sparteine, Idol, Morruol, Lanolin, and Saccharin. An entirely new

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DR. C. S. EVANS, Union City, Ind., says: "I have prescribed, and carefully noted its effect in several cases where the cerebral and cerebro-spinal centres were depressed, from various causes, and have been well pleased with the result."

DR. A. C. MACKENZIE, Negaunee, Mich., says: "I have used it ever since it was introduced to the profession, with very happy results, restoring quietude to cerebral disturbances superinduced by overwork."

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DR. J. GAMWELL, Pittsfield, Mass., says: "I have used it in a number of cases of nervous and cerebral diseases, with good results."

DR. E. S. LAWTON, Rome, N. Y., says: "I have used it with good results in cerebral exhaustion."

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chapter has been added on Antipyretics, in which the phenyl-derivatives, as Acetanilide (anti-febrine), Resorcin, Hydroquinone, Pyrocatechin, Salol, Naphthaline and Naphthol, Pyridine, Chinoline, Kairine, Thalline, and Antipyrine have been thoroughly considered. New articles on Mercuric Chloride and Iodine as antiseptic agents have also been introduced, and the article on Electricity rewritten and enlarged. Numerous articles have been much extended, particularly quinine, opium, belladonna, aconite, digitalis, etc., the medical uses of which have been more dwelt upon than in former editions.

"Useless botanical descriptions (notably in Rhubarb, Aloes, and Acacia,) have been curtailed, while the therapeutical application of the majority of drugs has been elaborated. To increase the usefulness of the index, which is as full as that of previous editions, bolder type has been used in referring to the principal action and uses of the various drugs."

SUGGESTIVE THERAPEUTICS, A Treatise on the Nature and Uses of Hypnotism, by H. BERNHEIM, M.D., Professor of the Faculty of Medicine at Nancy; translated from the second and revised French edition, by CHRISTIAN A. HERTER, M. D., of New York. Eight vo., cloth, pp. 420. G. P. Putnam's Sons, Publishers, New York and London, 1889.

The phenomena of hypnotism are undoubtedly of no little interest, although practical utility may be questioned by some. The work of Prof. Bernheim contains much food for thought in this progressive and realistic age. While the subject considered by him is regarded by many as only among the curiosities of science, yet others have proven it a therapeutic resource of more or less value.

The author in the first part of his book states in a very plain and satisfactory manner the method employed in inducing hypnotism, and the different manifestations of the hypnotized subject; this is followed by a short historical sketch, with an examination into the theoretical views on the subject, with his personal opinions upon the psychological mechanism of the phenomena ; and an examination into the application of suggestion to psychology, to legal medicine, and to sociology in a general way.

In the second part he makes a special study of suggestive therapeutics with his personal observations.

His translator is not only well versed in the subject, but in the two languages necessary for the translation, he has shown himself qualified.

The work is brought out in the best style of the famed "Knickerbocker Press."

SURGICAL BACTERIOLOGY, by NICHOLAS SENN, M. D., PH. D., Professor of Principles of Surgery and Surgical Pathology, Rush Medical College, Chicago, Ill. Eight vo., cloth, pp. 270. Price \$1.75. Lea Brothers & Co., Philadelphia, 1889.

Prof. Senn, in his introductory, very correctly states that "The recent advances in surgical pathology laid the foundation for the wonderful achievements of modern surgery."

The developments of bacteriology have indeed caused a most complete overturning and overhauling of former theories and methods in surgery ; and it is now recognized as an established fact that "all wound complications and most of the acute and chronic inflammatory lesions which come under the treatment of the surgeon are caused by micro-organisms." The author in this excellent monograph has very concisely yet fully and comprehensively gone over the field, and placed before the medical public a most valuable treatise on the subject.

That he is fully competent and capable has been amply evidenced by the position accorded him by his professional associates. He has well proven that he is a master of both the art and science of surgery—that his manual skill and dexterity are aided by well trained reason and observation. We know of no one better adapted for the task he has assumed, and doubt if any one could have discharged the self-imposed duty so well.

Those who would not be behind the wonderful developments of the day, will make a mistake in not supplying themselves with this work—the important facts in regard to this important subject are made so plain and are considered in such a satisfactory manner, that we can but regard it as one of the most important contributions to medical literature of the year.

The thirteen excellent plates are reproductions from *Lehrbuch der pathologischen Anatomie*, by Prof. Klebs, of Jena, 1887.

DIPHTHERIA, Its Nature and Treatment, by C. E. BILLINGTON, M. D., and INTUBATION IN CROUP, and other Acute and Chronic Forms of Stenosis of the Larynx, by JOSEPH O'DWYER, M. D. Octavo, 326 pages. Price, muslin \$2.50. William Wood & Co., New York.

But few monographs, treatises or essays upon this formidable disease are more worthy of reading than the excellent volume of Dr. Billington. While not an exhaustive treatise, as he modestly avers, it is so replete with sound teaching, correct observation and rational ideas, but little is left to be desired.

The author has unquestionably succeeded in presenting a clear and succinct statement of those facts in existing knowledge, which are most essential in forming an intelligent opinion as to the nature of diphtheria, and of those therapeutic principles and details that will enable the physician to treat the disease with the greatest degree of success.

His views upon diagnosis we regard as unusually good, and although he, as all others, must admit the uncertainty of early diagnosis in many cases, he certainly has made out as plain a statement of reliable facts as could well be done.

The concluding chapter, by an authority, on Intubation in Croup, and other Acute and Chronic Forms of Laryngeal Stenosis, is alone well worth the price of the book, and if the plain directions therein delineated are carried out, may prove of incalculable benefit to the practitioner. The illustrations throughout the work constitute a most important feature, notably the colored plate delineating diphtheria and follicular tonsillitis.

HAND-BOOK OF PHYSIOLOGY—KIRKE'S; by W. MORANT BAKER, F. R. C. S., late Lecturer on Physiology in St. Bartholomew's Hospital, etc., and VINCENT DORMER HARRIS, M. D., Demonstrator of Physiology at St. Bartholomew's Hospital, etc. Twelfth edition, re-arranged, revised and rewritten, with 500 illustrations. Eight vo., cloth, pp. 784. William Wood & Company, New York, 1889.

More than a third of a century ago, in addition to Dunglison's Physiology in two volumes, was placed in our hands Kirkes & Paget's Text-book for Students, then a modest and unpretentious

little duodecimo volume of about seven hundred pages. We have followed it through its successful editions until now we have the twelfth, revised by Mr. Baker and Dr. Harris, of St. Bartholomews. That it has kept pace with the progress of time is a self-evident fact, for along the line it has ever been recognized as a safe and standard guide, fully abreast with every measure of progress and advancement.

This edition of the well known Kirkes' Physiology, an old friend in a new garb, contains a large amount of new matter, especially in the sections on the blood, the heart, and the muscular system, while the chapters on the nervous system, the reproductive organs, and on development have been rearranged, and to a great extent rewritten. Thus this popular work has been brought fully up to the present status of physiology. A work so well known as this needs no further comment at our hands, especially when edited by such men as Mr. Baker and Dr. Harris.

A CLINICAL ATLAS OF VENEREAL AND SKIN DISEASES, INCLUDING DIAGNOSIS, PROGNOSIS AND TREATMENT. By ROBERT W. TAYLOR, A. M., M. D., Surgeon to Charity Hospital, New York, and to the Department of Venereal and Skin Diseases of the New York Hospital; late President of the American Dermatological Association. To be completed in eight folio parts, measuring 14x18 inches, and embracing fifty-eight beautifully colored plates, with one hundred and ninety-two figures, sixty-five engravings, and about four hundred pages of text. Price per part, \$2.50. *For sale by subscription only.* Two parts to be issued every two months. Parts V and VI, Diseases of the Skin. Lea Bros. & Co., Publishers, Philadelphia, 1888.

We have had occasion previously to call the attention of our readers to this magnificent atlas. It is unquestionably the grandest publication of its kind extant. The subject matter carefully prepared by so able a syphilographer and dermatologist as Prof. Taylor, so beautifully printed on the heaviest and best of paper, and the life-like illustrations, with which diagnosis of these affections is made so easy and certain, are beyond comparison.

Part V. comprises illustrations and chapters on Pediculosis,

Erythema Facei and Ephemeral Erythemata, Erythema Circinatum, Herpes Iris and Erythema Serpens, Tinea Versicolor, Tinea Tonsurans, Pityriasis Rubra, Dermatitis Exfoliativa, and Impetigo Herpetiformis.

Part VI., contains illustrations and chapters on Urticaria, Pemphigus, Tinea Trichophyton Barbæ, Tinea Circinata, Eethyma, Lupus Erythematosus and Herpes Zoster.

EXTRA-UTERINE PREGNANCY: 1. Its Pathology, by FRANKLIN TOWNSEND, M. D. 2. Its Diagnosis, by JOSEPH PRICE, M. D. 3. Its Treatment, by E. E. MONTGOMERY, M. D. 4. Observations—Clinical, Pathological and Surgical, by W. H. WATHEN, M. D. 5. A Critique of its Management, by J. M. BALDY, M. D. 6. The Technique of its Operation, by JOHN B. DEAVER, M. D. 7. Its Management when the Fetus Survives Tubal Rupture and goes on to the Period of Viability, by L. S. McMURTRY, M. D. 8. Its Treatment (concluded), by A. VANDER VEER, M. D. A Discussion. From the Transactions of the American Association of Obstetricians and Gynæcologists, 1888, together with an Editorial Review of Tait's *Ectopic Pregnancy and Pelvic Hematocele*, from the *Buffalo Medical and Surgical Journal*. Eight vo., cloth, pp. 66. Wm. J. Dornan, Philadelphia, 1889. Price 75 cents.

This valuable reprint from the *Transactions of the American Association of Obstetricians and Gynæcologists*, comprises a very complete and thorough consideration of a rare but very grave pathological condition. The various chapters are written by gentlemen who have been recognized as progressive and earnest devotees of the specialty to which it belongs.

A MANUAL OF DISEASES OF THE EAR, for the Use of Students and Practitioners of Medicine, by ALBERT H. BUCK, M. D., Clinical Professor of the Diseases of the Ear, in the College of Physicians and Surgeons, New York; Consulting Aural Physician, New York Eye and Ear Infirmary; 420 pages, illustrated. Price, extra muslin, \$2.50. William Wood & Co., New York.

Since the work by this author, published nearly a decade ago, on "Diagnosis and Treatment of Ear Diseases," he has been recognized as an authority on this subject. The manual just

issued in such handsome form by Messrs. Wood & Co., is not only a thorough revision of its predecessor, many chapters having been entirely rewritten, and considerable new matter added, but it is arranged in such admirable form as to make it most desirable as a text-book for students, as well as a valuable guide to the practitioner.

The initial chapters on General Pathology and General Diagnosis are most admirably prepared, and its concluding appendix, comprising an anatomical and physiological sketch of the ear, together with the subject matter of the main body of the work, embracing a full and comprehensive consideration of all general and special diseases of the ear and the parts adjacent thereto, leave nothing to be desired.

THE RADICAL CURE OF HERNIA, by HENRY O. MARCY, M. D., L. L. D., Surgeon to the Private Hospital for Women, Cambridge; President of the Section of Gynæcology, Ninth International Congress; late President of the American Academy of Medicine, etc., etc. Twelve mo., paper, pp. 251, illustrated, (Physicians' Leisure Library). Geo. S. Davis, Publisher, Detroit, Mich. Price paper 25 cents; cloth 50 cents.

This little book is offered to the profession, as the outgrowth of special studies upon the subject of Hernia for the last eighteen years. This subject is one of no little importance, and the reader will find it a very full, but carefully and concisely prepared statement of all that is known in regard to it. All methods and measures of cure are fully considered.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, Volume 2, No. 2, May. Eight vo., paper, pp. 264. William Wood & Co., Publishers, 56 and 58 Lafayette Place, New York.

In this number of this valuable series issued by Wm. Wood & Co., we have an excellent article on the Preventive Treatment of Calculous Disease and the Use of Solvent Remedies, by Sir Henry Thompson, F. R. S., M. B.; and one on Sprains: Their Consequences and Treatment, by C. W. Mansell Moullin, M. A., M. D. Remember, that the price of these valuable monographs, which can be sent you by mail, is only \$1.00 each, or \$10.00 for twelve numbers.

PHYSIOLOGICAL NOTES ON PRIMARY EDUCATION AND THE STUDY OF LANGUAGE, by MARY PUTNAM JACOBI, M. D. Twelve mo., cloth, pp. 120. G. P. Putnam's Sons, Publishers, New York, 1889.

The medico-literary world has already accorded a place to the talented authoress of this little volume, and although the work will prove of greater interest to the lay reader or one engaged or interested in educational interests, the professional reader will find the time spent in going through its pages of no little benefit.

ELECTRICITY AND ITS EMPLOYMENT IN REMOVING SUPERFLUOUS HAIR AND OTHER FACIAL BLEMISHES. By PLYM. S. HAYES, A. M., M. D., Professor of Gyæcology and of Electro-therapeutics, Chicago Polyclinic; Professor of Analytical Chemistry, Chicago College of Pharmacy, etc. Twelve mo., cloth, pp. 128. W. T. Keener, 96 Washington street, Chicago, Ill, Publisher, 1886.

Facial blemishes, superfluous hair, nævi and other disfigurements, can be successfully removed by electrolysis, and the best and most practical methods are very plainly and concisely stated in this little monograph.

Editorial.

IS THERE MORE THAN ONE ELEMENTARY SUBSTANCE?

Analogy forbids us to believe that, down to a certain limit of dimensions that we call medicines, the constitution of matter is of a wholly different sort from that which appears on sub-dividing the molecules. It is an equally incredible assumption that all atoms of the same element are so many independent creations exactly alike in every respect. Then, as our knowledge increases, the distinctions between the chemical elements are becoming less marked and their relations to each other more intimate. They are beginning to appear, not as isolated units, but as links in a complex network, which presents an unbroken continuity throughout. The recent study of the rarer earths leaves us in doubt whether we have an indefinite number of elements, or only one under unnumbered manifestations; and the later results of spectrum analysis seem to indicate quite clearly that,

at the high temperatures of the sun and the fixed stars, many of our terrestrial elements are decomposed. From a mathematical analysis of the spectra, Grunwald maintains—and supports his conclusion by a remarkable array of confirmatory measurements—that the remarkable solar spectrum line called helium, and the equally well-marked line of the sun's corona, come from two constituents of hydrogen gas, the first of which is somewhat heavier and the last far lighter than hydrogen gas.—*Prof. Josiah P. Cooke, in the Popular Science Monthly.*

This brings to our recollection frequent conversations with General Thomas B. Smith during the early part of the '60's, he at that time being the Colonel of the 20th Tennessee Regiment, C. S. A. He was a warm advocate of aerial navigation, and had given the subject of aeronautics considerable thought, and believed that this century would witness its complete development.

Briefly stated, his views were as follows: "That so far as hydrogen gas as a means was concerned we had about arrived at its highest degree of success—or that but little more than results due to additional experience could be expected of it."

"But," said he, "we now regard hydrogen as one of the elementary substances, such however, has not always been the case. It has not been so very many years ago, when water was considered an elementary body, but we now know it to be a compound of hydrogen and oxygen, the one of the specific gravity of our atmosphere and the other 14 times lighter. Now, there is just as much reason to believe that hydrogen is a compound, and if so, whenever it is resolved into its elementary substances, possibly we may find one of them 14 or more times lighter than hydrogen itself, and then the question of successful and practical aerial navigation is settled. With a gas 10 or 14 or more times lighter than hydrogen you could fill a wrought iron boiler and it would be as buoyant as the light textile fabrics that we now use in balloons. Or to any suitable reservoir filled with such a gas, machinery adequate as a motive power, and capable of being steered or guided in any direction, regardless of any wind currents, could be added; and navigation of the air will then be as practicable, as easy, as common as upon our seas, lakes or rivers."

SANDER & SONS' Eucalypti Extract (Eucalyptol.)—Apply to Dr. Sander, Dillon, Iowa, for gratis supplied reports on cures affected at the clinics of the Universities of Bonn and Greifswald.

AMERICAN MEDICAL ASSOCIATION.

The Fortieth Annual Meeting of the Association will be held in Newport, Rhode Island, June 25, 1889. The officers for the year 1888-1889, are:

President—W. W. Dawson, M. D., Ohio. *Vice-Presidents*—W. L. Schenk, M. D., of Kansas; Frank Woodbury, M. D., of Pennsylvania; H. O. Walker, M. D., of Michigan; J. W. Bailey, M. D., of Georgia; *Treasurer*—Richard J. Dunglison, M. D., Pennsylvania; *Permanemt Secretary*—Wm. B. Atkinson, M. D., Pennsylvania. *Librarian*—C. H. A. Kleinschmidt, M. D., Washington, D. C.

The Trustees of the Journal: J. M. Toner, M. D., Washington, D. C., President; John H. Hollister, M. D., Illinois; Secretary and Treasurer, E. M. Moore, M. D., New York; P. O. Hooper, M. D., Arkansas; L. S. McMurtry, M. D., Kentucky; Alonzo Garcelon, M. D., Maine; Leartus Connor, M. D., Michigan; E. O. Shakespeare, M. D., Pennsylvania; Wm. T. Briggs, M. D., Tennessee.

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THE OFFICERS OF THE SECTIONS.

Practice of Medicine, etc.—F. C. Shattuck, Boston, Massachusetts, Chairman; G. A. Fackler, Cincinnati, Ohio, Secretary.

Surgery and Anatomy.—N. P. Dandridge, Cincinnati, Ohio, Chairman; W. O. Roberts, Louisville, Kentucky, Secretary.

Obstetrics and Diseases of Women.—W. H. Wathen, Louisville, Kentucky, Chairman; A. B. Carpenter, Cleveland, Ohio, Secretary.

State Medicine.—J. Berrien Lindsley, Nashville, Tennessee, Chairman; S. T. Armstrong, United States Marine Hospital, New York, Secretary.

Ophthalmology.—Geo. E. Frothingham, Ann Arbor, Michigan, Chairman; G. C. Savage, Nashville, Tennessee, Secretary.

Laryngology and Oto-logy.—W. H. Daly, Pittsburg, Pennsylvania, Chairman; E. Fletcher Ingalls, Chicago, Illinois, Secretary.

Diseases of Children.—J. A. Larabee, Louisville, Kentucky, Chairman; C. J. Jennings, Detroit, Michigan, Secretary.

Medical Jurisprudence.—J. G. Kiernan, Chicago, Illinois, Chairman; T. C. Evans, Baltimore, Maryland, Secretary.

Dermatology and Syphilography.—L. Duncan Bulkley, New York, Chairman; W. T. Corlett, Cleveland, Ohio, Secretary.

Oral and Dental Surgery.—F. H. Rehwinkle, Chillicothe, Ohio, Chairman; E. S. Talbot, Chicago, Illinois, Secretary.

Chairman Committee of Arrangements, H. R. Storer, M. D., Newport, Rhode Island.

Notice to Exhibitors.—Intending exhibitors at the coming meeting of the American Medical Association should address Dr. Chas. A. Brackett, Newport, R. I., Chairman Sub-Committee upon Exhibitors. The following classes of applications have been entertained: 1° Medical books and stationary, charts and diagrams, busts, portraits, engravings, photographs, etc. 2° Hospital and ambulance plans and models. 3° Surgical instruments and supplies, general and special (gynaecic, obstetric, orthopedic, laryngeal, otic, ophthalmic, dental, etc.) 4° Microscopes, analysis outfits, and electro-galvanic apparatus. 5° Pharmaceutic products. 6° Rubber goods applicable to medicine and surgery. 7° Invalid furniture. 8° Invalid foods. 9° Sanitary appliances, as ventilators, filters, w. c. basins, traps, and similar necessities, and disinfectants. Choice of space will be given in accordance with the date of application. Applicants should state the character of their proposed exhibits, that they may be assigned to their respective groups. The sub-Committee reserve the right of rejection, in case of apparent reason.

HORATIO R. SUORER, M. D.,
Chairman Committee of Arrangements.

WASHINGTON IRVING BISHOP: WAS THE AUTOPSY
PREMATURE?

The wonderful and peculiar feats of "mind reading" performed by Bishop for some years past gave him a considerable degree of notoriety on both sides of the Atlantic. The manner and method of his death, which occurred at a New York club house on the morning of May 13th ult., has added no little to that notoriety, and has been a subject for newspaper comment for some weeks past.

He was born in Boston in 1856, and early obtained a reputation as a "mind reader." His exposé of the tricks of Slade and other spiritualists in England, about 10 years ago attracted much attention, together with his surprising feats of telling the numbers upon bank-notes that he had never seen. His demonstrations in this city only a few weeks ago caused no little comment, and although many theories have been advanced, none so far have any known scientific basis. That he was of a highly nervous organization and temperament is unquestioned; he being on frequent occasions subject to the trance or cataleptic condition, as was his mother before him.

The manner of his death is thus graphically delineated in the *Scientific American* of May 25th:

After some of his ordinary "tricks," experiments, demonstrations, or whatever they may be termed, "he asked the Secretary of the club to think of some word in the club's book of account or record. The Secretary, with Dr. J. A. Irwin, who was an acquaintance of Bishop, went down stairs where the books are kept, and selected the name of Margaret Townsend, found in some records, both fixing the word "Townsend" in their mind, and noting just where it appeared; they hid the book and went back up stairs. Bishop, blindfolded, had the Secretary's hand placed upon his own, and then led the party down stairs. He found the book without difficulty, turned over the pages rapidly till he came to the page where the name appeared, then skimming his fingers over it, gradually settled upon the word itself, although he was not told what the word was. All this had been done while he was blindfolded, and Bishop had been getting into a very excited state.

On being led back up stairs, he proposed to tell what the word was in a manner which would demonstrate that "muscle reading," as it is called, had nothing to do with the performance. He asked all to stand back, and, insisting that the Secretary should think intently of the word, stood apparently in a state of half consciousness, the bandage covering his eyes and other parts of his face. Soon he said, "I think it is a name." After further apparently intense mental effort, he exclaimed nervously, "Give me something to write with." Being handed pencil and paper, without an instant's hesitation he wrote, "Townsend," not in natural form, but as the word would appear written on paper and reflected in a mirror. "That is it," he exclaimed, and, as the persons about burst into applause, Bishop stiffened out and sank back unconscious.

Dr. Irwin assured the others that it was only one of the cataleptic fits to which Bishop was frequently subject, and was not dangerous. Bishop was stretched on the floor, and soon, under the care of the doctor, began to show signs of returning consciousness. When he was able to sit up, through apparently only half conscious, the doctor was explaining something of the physical features of the case to those present, stating that the peculiar backward fashion in which the name was written might be accounted for by the fact that the original reflection of everything seen by the eye is inverted as in a mirror, and is reversed by the optic lens on the way to the brain. Bishop, who had apparently heard everything, interrupted the doctor and asked him to make it clear that what was written on the scrap of paper was the exact copy of what appeared in his eye, and was written by him without conscious intervention of the brain.

Bishop was now so excited that the doctor ordered him to be taken to an upstairs room. His pulse was frightfully high, but he so strenuously insisted on doing the trick over again that the doctor finally consented, as affording the best means of quieting him. The book was brought, and Bishop, blindfolded, set out to find the word again. He wandered over the book with great difficulty, but finally hit the right page, found the word, and indicated it by a savage stroke of the pencil across it.

The "mind reader" was now more exhausted and excited than ever, and Dr Irwin, fearing a nervous collapse, sent for Dr. C. C. Lee to help him. Bishop had frequent spasms, and it was with difficulty that he could be held still. About 4 o'clock in the morning he had another violent cataleptic fit, and went from it into a state of coma, from which he had only moments of half consciousness for two hours, but not a clearly conscious moment from 6 o'clock in the morning until a few minutes past noon, when his pulse and breathing ceased, and he was apparently dead. For fear that it might be only a cataleptic trance, powerful electric currents were applied, and for half an hour some semblance of life was maintained, but at last the current ceased to have any effect, and the doctor said Bishop was unmistakably dead. The body was removed to an undertaking establishment, where, in the afternoon, an autopsy was made by Dr. Irwin and Dr. Ferguson, the pathologist of the New York Hospital.

The suddenness with which this autopsy was made, in the absence of authority from the friends or relatives of the deceased or from the coroner, has caused great feeling in the community. This is height-

ened by the fact that Bishop, his wife, and his mother, were opposed to an autopsy, and especially desired that in the event of his supposed death at any time the body should be kept as long as possible, for he had frequently been in a state of almost seeming death for a good many hours, as a consequence of these cataleptic fits, as had also his mother.

The autopsy is said to have shown nothing to indicate any cause of death, except the result of the great nervous strain to which Bishop had subjected himself. The brain was a little larger than usual for a man of his size, weighing forty ounces. The gray matter was unusually dark in color, but there was no malformation or other physical indication that the brain was other than that of an ordinary man. The case is one, however, that is sure to attract wide attention in the medical fraternity, and the controversies about it commenced on the very day the 'mind reader' died."

The coroner's jury impaneled to investigate the case, decided that the cause of his death was coma, and that the doctors acted in good faith, though hastily. To which we would add—unnecessarily hastily and imprudently.

FEBRILENE.—R. G. Eccles, in *The Druggist Circular*, makes the statement, which is quoted in quite a number of our exchanges, that this preparation, manufactured by the Paris Medicine Co., does not contain quinine, but only "quinidine" in mixture flavored with lemon syrup."

Its manufacturers state as follows: "We have by purifying the amorphous quinine obtained a pure alkaloid, the active principle of the amorphous quinine, which we have rendered tasteless, and which is equal to sulphate of quinine in every respect."

Biddle's *Materia Medica*, 11th edition, says of quinidine that, "according to Liebig, it bears the same relation to ordinary quinine that uncrystallizable sugar bears to the crystallizable. It is considered equally efficacious with quinine."

Ringer in his *Handbook of Therapeutics*, 12th edition, quoting from the medical Committee appointed by the Indian Government to estimate the relative value of the alkaloids of cinchona, has the following: "The general opinion was that sulphate of quinine and sulphate of quinidina possess equal febrifuge power."

As for our own opinion in regard to febrilene, which we give unasked and unhesitatingly, it is that in every instance in which we have tried it, and the instances have been quite numerous, it has proven

equally efficacious as the sulphate of quinine, and is unquestionably the most palatable form of quinine, amorphous quinine, or quinidia that we have ever tried. These two facts, which have been sustained in our own experience and that of many of our acquaintances—its efficacy and its ease of administration in the cases of children, fully justify us in regarding Febrilene, or The Tasteless Syrup of amorphous quinine as a valuable addition to our Therapia.

A NEW MEDICAL COLLEGE IN TENNESSEE.—A medical college has been organized in Knoxville, with the following-named faculty: Dr. J. C. Cawood, Dean and Professor of Theory and Practice of Medicine; Dr. C. M. Drake, Professor of Anatomy and Pathological Anatomy; Dr. C. C. Lancaster, Professor of Physiology; Dr. W. E. Moses, Professor of Chemistry; Dr. J. W. Hill, Professor of Surgery; Dr. M. Cowen, Professor of Orthopædic and Operative Surgery. Dr. R. M. C. Hill, Professor of *Materia Medica* and Therapeutics; Dr. C. M. Ristine, Professor of Obstetrics and Gynecology; Dr. J. M. Masters, Professor of Diseases of the Eye, Ear, Nose and Throat; Dr. M. Campbell, Professor of Mental and Nervous Diseases; Hon. H. R. Gibson, Professor of Medical Jurisprudence; and Dr. C. M. Cawood, Demonstrator of Anatomy. It is announced that there is to be a Chair of Dental Surgery.

KATHARMON.—Dr. H. Tuholske, Professor of Clinical Surgery and Surgical Pathology, Missouri Medical College, also Professor of Surgery and Diseases of the Genito-Urinary Organs, St. Louis Post Graduate School of Medicine, writes: After an extended experience I am able to say that with Katharmon there is added to our list a preparation of decided elegance and great efficiency. It is an antiseptic of considerable power, yet mild, pleasant, non-irritating and non-poisonous. It has quite a range of applicability and I have used it with satisfactory success in Catarrhal affections of the mucus membranes of the mouth, throat, nose, etc., and as a dressing for fresh wounds and of foul ulcers, and as a douche for offensive discharges. We are indebted to the Katharmon Chemical Co., of St. Louis, for the introduction of this valuable preparation.

SYPHILITIC ULCERATION OF THE SOFT PALATE.—Dr. I. W. Condict, of Dover, N. J., writes: I have recently witnessed satisfactory results from the persistent administration of *Succus Alterans* in an aggravated case of the destruction of the tonsil, velum and all surround-

ing soft parts, where iodide of potassium had been exhibited more than two months in liberal doses, even as high as four hundred grains per day continually for three weeks of the time, and had failed to arrest the progress of the disease.

(We personally know Dr. Condict as a physician of large practice, much above the average in education, and one of the most successful physicians in New Jersey. Coming from him the above is a very high commendation.—*Ed. Mass. Med. Journl.*)

BOARD OF MEDICAL EXAMINERS.

The following gentlemen have been appointed by Gov. Robt. L. Taylor:

J. B. Murfree, M. D., of Murfreesboro.

D. D. Saunders, M. D., of Memphis.

E. E. Hunter, M. D., of Elizabethton.

H. P. Williams, M. D., of Cowan.

Eclectic.—Dr. W. H. Halbert, Lebanon.

Homeopathic.—Dr. Thos. Hicks, Knoxville.

NUTROLACTIS.—In the *Medical Brief* for May, Dr. B. F. Jones, of Texas, reports excellent results with this galactagogue. In a report of two cases benefited by it he has the following :

“ Aside from its galactagogue properties, it is an efficient general tonic—improving the appetite, digestion and assimilation.

I report these two cases for the reason that I believe Nutrolactis to be by far the best galactagogue ever presented to the medical profession.”

DYLMENORRHEA.—William Wiles, M. D., Snaresbrook, Essex, says: I used Aletris Cordial especially in a case of severe dysmenorrhea of considerable standing. The first period that occurred after taking the Cordial was passed through with considerably less pain than usual. The patient took the medicine for a week before the menstrual period was expected for six months. At the end of that time no difficulty or pain was experienced. So that, considering the time the patient had been suffering before, the benefit was very marked.

A BOSTON PAPER SAYS: “ There is no hotel in New York so satisfactory as the famous Sturtevant House, Broadway cor. 29th street. Its location is central and Matthews & Pierson its proprietors serve guests on both European and American plans and their charges are very reasonable.”

TAKES THE PLACE OF ARSENIC.—I have found Crystalline Phosphate *par excellence* in all cases wherein, in days gone by, arsenic was indicated. P. J. GERLACH, M. D., 311 W. 8th street Cincinnati, O.

KATHARMON.—In quite a series of cases of chronic Pharyngeal and nasal catarrh, this remedy used with the atomizer has given most satisfactory results. We heartily advise our readers to give it a trial.

LACTOPEPTIN.—Now that the days of Cholera Infantum are close at hand, our readers will do well to bear in mind the valuable properties of Lactopeptin both as a curative and prophylactic agent.

CAMPHO-PHENIQUE.—We have recently made several trials of this new candidate for professional favor, in cases of fresh wounds and chronic ulcers, and have found it a most excellent dressing.

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MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various antisepsics in the treatment of Diseases of the Oral Cavity, by W. D. MILLER, A.B., PH. D., D.D.S., Professor of Operative and Clinical Dentistry, University of Berlin, from whose deductions Listerine appears to be the most acceptable prophylactic for the care and preservation of the teeth.

Diseases of the Uric Acid Diathesis. LAMBERT'S

LITHIATED HYDRANGEA.

Kidney Alterative—Anti-Lithic.

FORMULA.—Each fluid drachm of "Lithiated Hydrangea" represents thirty grains of FRESH HYDRANGEA and three grains of CHEMICALLY PURE Benzo-Salicylate of Lithia. Prepared by our improved process of osmosis, it is INVARILY of DEFINITE and UNIFORM therapeutic strength; hence can be depended upon in clinical practice.

DOSE.—One or two teaspoonfuls four times a day (preferably between meals).

Urinary Calculus, Gout, Rheumatism, Bright's Disease, Diabetes, Cystitis, Hæmaturia, Albuminuria, and Vesical Irritations Generally.

We have had prepared for the convenience of Physicians Dietetic Notes, suggesting the articles of food to be allowed or prohibited in several of these diseases.

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DIETETIC NOTE.—A mixed diet should be adopted, the nitrogenous and saccharine articles being used in limited amounts.

Allowed.—Cooked fruits without much sugar, tea and coffee in moderation. Alcoholic stimulants, if used at all, should be in the form of light wines, or spirits well diluted. The free ingestion of pure water is important.

Avoid.—Pastry; malt liquors and sweet wines are veritable poisons to these patients

WAYNE'S DIURETIC ELIXIR.

COMPOSED OF BUCHU, JUNIPER, ACETATE OF POTASH, ETC.

DIURETIC AND ALTERATIVE.

INDICATIONS.—Acute and Chronic Catarrh of the Bladder. Brick Dust and Chalky Deposits in the Urine, Gravel, etc. Acute and Chronic Bright's Disease, Lumbago, and in Acute and Chronic Rheumatism.

PRESCRIBED and Endorsed by the Leading Physicians of the U. S. It is giving universal-satisfaction to the profession. It seems to be ALMOST A SPECIFIC for Diseases of the Genito-Urinary Organs.

EXTRACT FROM LETTER, W. F. GLENN, M.D.,
Professor of Genito-Urinary Diseases in the Medical Department of the University of Tenn.,

No practitioner passes many days, or seldom many hours, without being called upon to prescribe for some real or imaginary disease of the kidneys. While such serious disorders as diabetes and Bright's disease, in which these organs are fatally involved, are occasionally met with, they are few as compared with the many minor affections, not only in the kidneys themselves, but on all parts of the genito-urinary tract. Catarrh of the kidneys, ureter, bladder or urethra, irritations and congestions of the various parts of the urinary apparatus, are as common as bad colds. What is more frequent than patients complaining of pain in the back, in the region of the kidneys, with or without a scant flow of urine, or a burning sensation in the neck of the bladder or urethra on voiding urine, and numbers of other similar ailments. In all forms of functional derangements of these important excretory organs the administration of a gentle but effective diuretic generally affords relief. Where an analysis of urine proves the absence of elements that would indicate serious organic lesions it is a safe and in fact a proper course, to use a remedy that will stimulate to gentle action the cells of the kidneys, thereby increasing the watery portions of the urine. Such a course will rarely fail to affect a cure.

For this purpose there is nothing superior to buchu, juniper, acetate of potash, corn silk and digitalis. The action of many of this class of remedies, such as corn silk, juniper, eucalyptus, etc., have a more or less specific influence on bladder and urethral irritations and inflammations.

Some years since my attention was attracted to a remedy styled Wayne's Diuretic Elixir, which, upon examination, I found to be a combination of acetate of potash, juniper and buchu, prepared in such a manner as not to be unpleasant, but rather agreeable to the taste and accurate in its proportions. Being easier to prescribe and by far more pleasant to the patient than the same remedies freshly mixed in the drug store, I began to use it in all irritations of the kidneys, bladder, urethra and prostate gland, and have found it to meet every indication. Now, when I desire a mild diuretic effect continued for some time, I rarely depart from this mixture. Prof. Deering J. Roberts, Surgeon to the State Prison, has been using it largely of late at the hospital of that institution, and reports it perfectly satisfactory. Numbers of others of my medical brethren, to whom I have suggested its use, have reported it thoroughly satisfactory. Case after case taken from my own and from other record books, could be cited to show its satisfactory effects, but that is hardly necessary. And while I am not an advocate of the wholesale use of all the various preparations that are now crowded upon us, at the same time, after thoroughly testing this one for some years, I feel that it will not be amiss to present its virtues to the profession. Not for any new virtue that its ingredients may possess, for they have been understood for many years, but because of its careful preparation and pleasant taste, and thereby ready utility. From the very highly satisfactory results obtained by me for the past five years, I am quite sure its use will be attended with no disappointment or regret.

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The **TONICS**—Quinine and Strychnine;

And the **VITALIZING CONSTITUENT**—Phosphorus, Combined in the form of a Syrup, with *slight alkaline reaction*.

IT DIFFERS IN EFFECT FROM ALL OTHERS, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

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Children take it and never know it is Medicine.

NEVER PRODUCES SICK STOMACH, and always produces the same result as the bitter quinine. In the manufacture of quinine there is left, after crystallizing the quinine, a dark colored substance known as Amorphous Quinoid. We have by purifying the Amorphous Quinine obtained a pure alkaloid, the active principle of the Amorphous Quinine, which we have rendered tasteless, and which is equal to Sulphate of Quinine in every respect. It is tasteless, because it is insoluble in the mouth, but dissolves readily in the acids of the stomach. We use no Tannin; no Yuba Santa, which contains a large per cent. of Tannin.

Physicians can make Tasteless Tonics for Children and Ladies by combining with the Febri-
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Nashville, Tenn., Oct. 29, '85.

We have tried "Lyon's Taste less Preparation of Quinine," and take pleasure in saying they are all that is claimed for them, and as palatable as sugar.

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Gentlemen:—I have tried Tasteless Quinine with splendid result. It can be taken by children readily, and will produce the same result as the Quinin Sulph. I shall continue to use it, especially among children, and can heartily recommend it to any one desiring a palatable and reliable preparation of this drug.

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Hickory Valley, Ark., Jan. 27, '85.

Dear Sirs:—Received samples of your Tasteless Quinine Preparations. Found them satisfactory. Am using them in all cases of children requiring quinine.

E. F. BEVENS.

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Dear Sirs:—I have used the Tasteless Syrup of Quinine sent me, and am highly pleased with it. Children and Infants take it without any trouble, and it is as effective as the Sulphate of Quinine in controlling mala-ia.

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Air Mount, Miss., Jan. 28, '85.

Paris Medicine Co., Paris, Tenn.

Gents:—Your preparation of Lyon's Tasteless Quinine was received. I was highly pleased with the use of it. It is the only preparation of Tasteless Quinine that I find entirely satisfactory. I deem it invaluable for infants and children, and it is as efficient in its action in every way as the Sulphate.

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Paris Medicine Co.

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S. N. MARSHALL, M. D.

Columbus, Ark., Jan. 25, '85.

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R. M. WILSON, M. D.

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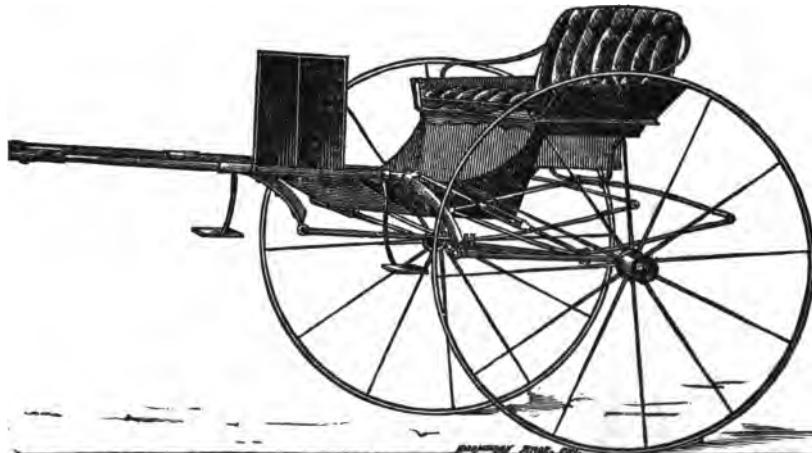
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WHEELER'S COMPOUND ELIXIR OF PHOSPHATES AND CALMAYA. A Nerve Food and Nutritive Tonic, for the treatment of Consumption, Bronchitis, Scrofula and all forms of Nervous Debility.

The Lactophosphates prepared from the formulae of Prof. Dusart, of the University of Paris, combined with a superior Pernardin Sherry Wine and Aromation in an agreeable cordial easily assimilable and acceptable to the most irritable stomachs.

Medium medicinal doses of Phosphorus, the oxidizing element of the Nerve Centers for the Generation of Nerve Force; Lime Phosphate, an agent of Cell Development and Nutrition; Soda Phosphate, an excitant of functional activity of Liver and Pancreas, and Corrective of Acid Fermentation in the Alimentary Canal; Iron, the Oxidizing Constituent of the Blood for the generation of Heat and Motion; Phosphoric Acid, Tonic in Sexual Debility; Alkaloids of Calmaya, Anti-Malarial and Febrifuge; Extract of Wild Cherry, uniting with tonic power the property of calming Irritation and diminishing Nervous Excitement.

THE SUPERIORITY OF THE EXILIXIR consists in uniting with the Phosphates the special properties of the Cinchona and Prunus, of subduing fever and allaying Irritation of the Mucous Membrane of the Alimentary Canal, which adapts it to the successful treatment of Stomach Derangements and all diseases of faulty nutrition, the outcome of Indigestion, Malassimilation of Food, and failure of supply of these essential elements of Nerve Force and Tissue Repair.

The special indication of this combination of Phosphates in Spinal Affections, Caries, Necrosis, Ununited Fractures, Marasmus, Poorly Developed Children, Retarded Dentition, Alcohol, Opium and Tobacco Habits, Gestation and Lactation to promote Development, etc., and as a physiological restorative in Sexual Debility and all used-up conditions of the Nervous System should receive the careful attention of good therapeutists.

There is no strychnia in this preparation, but when indicated, the Liquor Strychnia of the U. S. Dispensatory may be added, each fluid drachm of the solution to a Pound of the Elixir making the 64th of a grain to a half fluid ounce, an ordinary dose, a combination of a wide range of usefulness.

DOSE.—For an adult, one tablespoonful three times a day, after eating; from seven to twelve years of age, one dessertspoonful; from two to seven, one teaspoonful; for infants, from five to twenty drops, according to age.

Prepared at the Chemical Laboratory of T. B. WHEELER, M.D.
Montreal, D. C.

Pack up in pound bottles and sold by all Druggists at One Dollar.

(12B)

A Phosphorized CEREBRO - SPINANT, (FREELIGH'S TONIC.)

F O R M U L A .

Ten minimis of the Tonic contain the equivalents (according to the formulae of the U. S. P and Dispensatory) of

Tinct. Nux Strychnos.....	1	minim,
" Ignatia Amara	1	"
" Cinchona	4	"
" Matricaria.....	1	"
" Gentian.....	1	"
" Columbo	2	"
" Phosphorus, C. P.....	1-300	gr.
Aromatics.....	2	minims,

Dose: 5 to 10 drops in 2 tablespoonfuls of water.

I N D I C A T I O N S .

Paralysis, Neurasthenia, Sick and Nervous Headache, Dyspepsia, Epilepsy, Locomotor-Ataxia, Insomnia, Debility of Old Age, and in the Treatment of Mental and Nervous Diseases.

One of the most widely known physicians in the country, residing in Washington, says:
"The elegance of the formula, the small dose required, and its potency go far to recommend the Tonic to the profession in that large class of neuroses so common among the brain workers in this country."

A well known physician of Chicago, in practice since 1859, says:
"It will be a revelation to most physicians. I have found it peculiarly adapted to the mentally overworked Public School teachers, as well as to the worn out business man."

A Philadelphia physician says:
"Your tonic is a noble remedy. Some of my patients call it the "Elixir of Life." In Atonic Dyspepsia and as an aphrodisiac it cannot be excelled."

A Baltimore physician, whose Diploma dates from 1825, says:
"Your combination I find vastly more effective than any tonic I ever used. It furnishes a most powerful evidence of the vastly increased power of medicament by combination and judicious pharmaceutical preparation."

While an Ohio physician says:
"I have been in the profession since 1841, and must frankly say have never been much inclined to run after strange gods, but this new manipulation and combination pleases me."

The above and many similar letters from the profession can be examined at our office. Over 13,000 physicians in New England and the eastern Middle States are prescribing the Tonic regularly.

Price, One Dollar per Bottle, containing 100 of the average 5-drop doses

Physician's single sample delivered, charges prepaid, on application. That every physician may be his own judge of its value, irrespective of the opinion of others, we make the following:

S P E C I A L O F F E R .

We will send to any physician, delivered, charges prepaid, on receipt of 25 cents, and his card or letter head, half a dozen physician's samples, sufficient to test it on as many cases for a week to ten days each.

The Tonic is kept in stock regularly by all the leading wholesale druggists of the country.

As we furnish no samples through the trade, wholesale or retail, for samples, directions price lists, etc., address,

**I. O. WOODRUFF & CO.,
Manufacturers of Physicians' Specialties,
88 Maiden Lane, New York City.**

Pepsin in Infantile Diarrhoea.

Statistics show that the mortality rate of infantile diarrhoea, as it manifests itself in the summer months, is higher than that of any other disease.

Unhygienic conditions and improper nourishment, aggravated by high temperature, are the chief causes assigned for the prevalence of this disorder. How to effectually remove or overcome these causes is a question of the gravest importance to sanitarians and physicians. It must be admitted, however, that these conditions, for a large portion of infantile humanity, must continue to exist, and consequently the problem presented to physicians is how to cure the disease in spite of unfavorable conditions when it has firmly established itself. The solution of this question often taxes the ingenuity of the medical attendant in vain.

How shall the conditions present best be met? To answer this query has inspired exhaustive contributions from the pens of our most learned writers. It is admitted by all that one of the causes which incites and perpetuates the gastric and intestinal inflammation is undigested, or partly digested, fermenting milk or other food, the decomposition of which is accompanied by the development of ptomaines and other toxic principles. It is as an aid to the removal of this cause, both in predigesting milk or other food before it is given, and in digesting fermented undigested food in the stomach that Pepsin is indicated in infantile diarrhoea, and its efficacy has been attested by many well known medical writers. See *J. Lewis Smith, M. D., Archives of Pediatrics, Sept., '81, p. 518; Nov., '86, p. 639; Nov., 1864, p. 424.* Prof. Voelker, of Berlin, *Archiv. J. Kinderh., vol. 9, p. 8.* Dr. L. N. Love, *St. Louis Weekly Medical Review, Aug., '88.* T. Lauder Brunton, *Diseases of Pediatrics, 1884, p. 430.* Discussion at German Medical Congress, at Salzburg, 1881, by Demme, Biedert, Gerhardt, Henock, Steffen, Thomas, Soltman, Pfeiffer. Prof. Leeds, *Archiv. Ped., 1884, p. 431, etc.*

With the improvements that have of late been made in the purity, quality, and digestive efficacy of pepsin, this agent is likely to play a more important and definite part in the treatment of intestinal inflammations than ever before. Its ease of administration, its certainty of action when a proper product is administered, will, we believe, lead to its extensive use.

We say *proper product*, advisedly, for it is well known that many pepsin products are absolutely inert or of very low digestive power, or infested with chemical poisons (leucomaines and ptomaine—See Vaughan and Novy's Ptomaines and Leucomaines), the disagreeable odor they possess being significant of putrefaction.

It goes without saying that a product of the latter type would only augment the inflammation, and physicians should look well to the character of the pepsin used. It should, in the first place, be absolutely devoid of the odor characteristic of putrefying mucus, and in the second place, it should freely dissolve in water at all temperatures, for, as solubility is one of the distinguishing peculiarities of the unorganized ferments, it is the best evidence of purity in a pepsin.

We guarantee the purity, activity and solubility of our pepsin products. Our pepsin is absolutely free from odor, and has been shown by expert examination to be free from ptomaines and leucomaines, and demonstrated by an exhaustive comparative test to possess twice the digestive power of the most active hitherto introduced. (See Observations on Digestive Ferments, by R. H. Chittenden, Ph. D., *Philad. Medical News*, February 16, 1889.)

In raising the standard of digestive strength by our investigations, we have adopted 1 to 2,000, forty times that required by the last pharmacopoeia, believing this strength would best meet practical requirements. We are, however, prepared to supply pepsins of almost any strength up to a product capable of dissolving 6,000 times its weight of albumin.

Since a 1 to 2,000 pepsin has been proven to be amply efficient and most convenient for making the official preparations, it is a question if a higher power pepsin, of which an inconveniently small dose would be required, would not unnecessarily embarrass dispensers without accomplishing practically any better results.

It is not probable that the pharmacopoeia will ever adopt a standard for pepsin higher than that which we now observe, and it will only be by recognizing this authority that the term "pepsin" can ever come to mean a preparation of definite digestive strength. As it now is, unless some particular brand is specified, a pharmacist is justified in putting up the most worthless products on his prescriptions.

Sample of Pepsinum Purum in scales or in powder and reprints of articles by eminent authorities on pepsin, and pancreatin, list of preparations and information of methods of peptonizing food, mailed free on request.

PARKE, DAVIS & CO.,

Detroit

and

New York.